Attachment C. Proposed Clarification of Reservoir Refill Criteria





Proposed Clarification of Reservoir Refill Criteria

Introduction

Please refer to the discussions in Sections 3.4.4 and 4.5.3 for background on the issue and this proposal.

Summary

The proposal is that reservoir refill criteria would be applied to refill of storage vacated by transfers of stored water for in-basin needs in a different manner than for transfers of stored water for out of basin uses. The watershed protection statute of Water Code section 11460 et seq. creates a priority for in-basin uses over CVP and SWP exports. This priority can be interpreted to mean that reservoir storage vacated by a transfer of stored water for in-basin use would only be subject to reservoir refill criteria when the CVP or SWP were augmenting natural flow with releases of stored water in order to meet in-basin demands, including Delta outflow requirements (e.g. when Term 91 is in effect).

Definitions

Discussing the application of reservoir refill criteria requires a common understanding of relevant terminology. In particular, DWR, USBR, SWRCB, and stakeholders need to agree on definition of the terms "watershed of origin", "excess conditions", "balanced conditions", and "Term 91" as these terms are used in this context.

Watershed of origin - This term applies to the contiguous drainage area, looking upstream from the place of use to where the water originates. It excludes those watersheds or drainage areas to which water is exported. For example, if the place of use of transferred water is in the Sacramento Valley below the confluence of the Feather and Sacramento Rivers, and the water originates in the Yuba River, the watershed of origin would include all of the Sacramento and Feather River drainage areas. The watershed of origin in a particular transfer will be defined by the source of the water and the ultimate place of use.

Excess Conditions - These conditions exist when all in-basin water demands in the Delta watershed and export demands are being met by natural flows, and water in excess of that needed to meet Delta standards is flowing out the Delta.

Balanced Conditions - These conditions exist when the only water flowing into the Delta is that amount needed to meet Delta standards, required Delta outflow, in-Delta consumptive uses, and project exports. Under balanced conditions all in-basin water demands are being meet and the CVP and SWP are storing (or releasing) and exporting water in a manner that





does not allow water above that needed to meet Delta standards to leave the Delta.

Term 91 - This standard water right condition has been included in all water right permits issued in the watershed of the Sacramento/San Joaquin Delta since 1983. It was adopted by the SWRCB as part of Water Right Decision 1594. Term 91 has also been added to water right permits greater than 1 cfs or 100 AF issued in the Delta watershed with priority dates from the mid-1960's. This condition defines the period when natural flows (and abandoned flows) in the Bay/Delta watershed are not sufficient to satisfy all in-basin demands for water, including those flows needed to meet the Delta standards. Under these conditions, the CVP and SWP are no longer diverting or storing natural flows; instead they are augmenting the natural flows and other reservoir releases in the system with their own storage releases to meet the Delta standards. When Term 91 is added to a water right permit, it in effect establishes the Delta standards as a flow bypass requirement and prevents in-basin users from diverting CVP and SWP stored water intended to augment natural flows to meet Delta standards. (This condition refers to requirements of the SWRCB and does not specifically include operational constraints imposed on the projects by ESA or CVPIA). Term 91 was based on the existing regulatory framework created by State Board Decisions 1485 and 1594. This framework is flexible and has been modified by Decision 1641 and may be further modified by subsequent decisions adopted by the Board to implement the 1995 Water Quality Control Plan.

Why are Refill Criteria Needed?

The water rights of the CVP and SWP in the Delta watershed cover more than 55% of the stored water in the Sacramento - San Joaquin River systems. The projects have the capability to directly divert over 15,000 cfs from the channels in the Delta. Many of the water rights of the CVP and SWP have priority dates that date to 1927 and 1933. Balanced conditions exist for over half of the year in wet and normal years. During dry years, balanced conditions can extend from nine months to the entire year.

The impacts of a stored water transfer on the CVP and SWP's ability to divert water are not felt at the time water is transferred. Rather, these impacts can occur when the storage vacated by the transfer is refilled, which typically occurs in the winter or spring following the transfer. In balanced conditions, while the CVP and SWP may be diverting water to storage or releasing water for export, the amount available for their diversion or export could be reduced, if at the same time a non-project reservoir is filling storage previously vacated by a stored water transfer. In this case, the CVP/SWP diversion would have to be reduced in order to maintain sufficient flows into the Delta for outflow and export demands. Since the stored water transfer for a place of use not within the watershed of the reservoir does not have the watershed protection priority of Water Code Section 11460, refill criteria are needed to avoid injury to the CVP/SWP. If the refill occurs when the Delta is in excess conditions, then the refill has no effect on the CVP and SWP and criteria would not be triggered.

The Watershed Protection Act

The proposal to clarify the application of refill criteria is based upon Section 11460 of the California Water Code, generally referred to as the "Watershed Protection Act". The intent is to make a distinction between the application of reservoir refill criteria for stored water transfers with a place of use in the watershed of origin, as defined in Water Code Section 11460, and those with a place of use outside the watershed of origin. Water Code Section 11460 applies to the operation of the SWP by DWR. Water Code section 11128 makes Section 11460 applicable to the operation of the CVP by the USBR.



Water Code Section 11460 states that in operating these projects, the agencies shall not deprive the watershed or area wherein the water originates the prior right to all the water reasonably required to adequately supply the reasonable and beneficial needs of the watershed, area, or any of the inhabitants or property owners. Therefore, based on the watershed protection priority, the State Board would grant water rights to a new water storage project to store water in the winter months, for in-basin uses, even if that new storage would affect the ability of the CVP or SWP to store or divert natural flow for export. Even though such new storage would impact the CVP and SWP, the impact is not considered to be a legal injury which would otherwise be proscribed by the Water Code. Term 91 conditions would likely be a condition of such a new storage right, in order to protect CVP or SWP storage releases from downstream diversion.

Application of Watershed Protection Statute to Reservoir Release Transfers

If the watershed protection priority would allow new storage for in-basin uses, it follows that water rights holders can change the place of use of their water to accomplish the same thing. When applied to a proposed reservoir release transfer for an in-basin use, this means that even though the transfer will result in an impact to the operations of the CVP and the SWP, the impact may not be considered a legal injury to the SWP or CVP, which would require mitigation by the application of refill criteria.

Whether or not the impact is a legal injury which triggers reservoir refill criteria depends on conditions in the Delta. If the storage vacated by water transferred to an in-basin use is replaced (refilled) during excess or balanced conditions, refill criteria are not applicable. If the storage vacated by transferred water is refilled when Term 91 is in effect, then refill criteria would apply. The Watershed Protection Act does not allow inbasin water users to divert water which has been released from storage by the CVP or SWP for purpose of meeting Delta or other in-basin obligations.

If the place of use for the water transfer is outside the watershed of origin, as it relates to the CVP and SWP, then refill criteria apply when the Delta is in balanced conditions. The transfer of water to a place of use outside the area or watershed of origin has no priority over CVP and SWP exports.

Types of Reservoir Release Transfers and Conditions of Refill Criteria

Table 1 below displays the application of reservoir refill criteria to the different types of reservoir release transfers. This is based on the application of the Watershed Protection Act.

Table 1 - Conditions when Refill Criteria to Protect CVP/SWP are Applicable

Place of Use of Water Transferred	Excess Conditions	Balanced Conditions	Term 91 Conditions
Same watershed	NO	NO	YES
Different watershed	NO	YES	YES



Summary

The refill of storage vacated by the transfer of stored water can cause injury to other legal users of water. The timing of the refill of this vacated storage is restricted to specific periods of the year to mitigate for these potential impacts depending on the place of use of the stored water being transferred, as indicated by the following scenarios:

- When refill occurs during imposition of Term 91, then injury may occur even if the transfer place
 of use is within the watershed of origin. The Watershed Protection Act protects the "prior rights"
 of in basin users to divert water, but it does not provide in basin users access to stored water released
 from an SWP or CVP reservoir for the purpose of meeting project obligations.
- If the place of use of the transferred water is within the area of origin of the water vis-a-vis SWP and CVP exports, then refilling of vacated storage is allowed to occur anytime "Term 91" is not imposed. Refilling, however, may further be restricted to times that do not impact in-basin demands of the CVP or SWP (as may be the case for some stored water transfers within the watersheds of the Folsom or New Melones Reservoirs). While imposition of Term 91 occurs in many years, it is unlikely to be triggered at a time when reservoirs would be filling vacated storage space. Thus, it would appear that reservoir refill criteria should rarely apply to in-basin (same watershed) transfers of stored water.
- When the Delta is in "balanced conditions", if the transfer is to an area in the watershed of origin, "no injury" occurs during refill. However, if the place of use of the transfer is out of the watershed of origin, then the Watershed Protection Act does not apply and refill criteria are applicable to mitigate impacts to the SWP and CVP. If the place of use is outside the area of origin vis-a-vis the SWP and CVP, then refilling of storage can only occur outside of "balanced conditions." Thus refill criteria are necessary to mitigate impacts to the CVP and SWP.
- When the Delta is in "excess conditions", there is no injury to the CVP and SWP because the transfer and the subsequent reservoir refill do not adversely affect their operations. This is the case whether the place of use of the transferred water is within the watershed of origin or to an export area. Thus, refilling of vacated storage is always allowed when the Delta is in "excess conditions".

